

## **AAR-100**

## **Human Factors Newsletter # 02-04**

## February 16, 2002 - March 1, 2002

ADM Expert Panel Meeting: Leading researchers in the area of general aviation aeronautical decision-making (ADM) met in Alexandria, VA from January 24 through February 1. The panel was chaired by a scientist from the Office of Aviation Medicine, and included prominent researchers from the United States, Norway, Australia, and New Zealand. The purpose of the meeting was to develop interventions which could be used to improve decision-making by general aviation pilots. The panel identified and provided to the ADM Joint Safety Analysis Team (JSAT) over 100 potential interventions ranging from simple changes in the order of information presented during weather briefs, to fundamental changes in the training of private pilots. The ADM JSAT, consisting of both industry and FAA personnel, will now take those recommended interventions and evaluate their feasibility and effectiveness before presenting them to the agency for action. (D. Hunter, AAM-240)

**Automated Flight Service Station Voice Switch:** Engineering research psychologists from the William J. Hughes Technical Center/ACT-530 are participating in an evaluation of proposals for the Automated Flight Service Station Voice Switch (AFSSVS) program, sponsored by AND-320. The AFSSVS provides air-ground and ground-ground communications in AFSSs nationwide. The human factors attributes and user interfaces of proposed systems are being evaluated by a team of human factors and AFSS subject-matter experts. The evaluation will continue through March 2002. (K. Allendoerfer, WJHTC)

## **JANUS:**

- A CAMI researcher (AAM-510) traveled to Ft. Worth during the quarterly meeting of the Office of Runway Safety to provide a briefing summarizing the human factors aspects of the October 2001 accident at Linate Airport, which had resulted from a runway incursion when a Cessna Citation crossed the runway in front of a departing MD-87, causing 118 deaths and destroying both aircraft. The title of the briefing was: *Linate: "Human error compounded by weather." Is there more to the story?* The JANUS techniques for ATC and flight deck were used to organize causal factors around multiple perspectives. (J. Pounds, CAMI)
- In January, the ATC field test of JANUS began. JANUS for ATC is a human factors-based technique for identifying and organizing causal factors related to operational errors. To date, data has been collected by AAM-510 at ATC facilities in New England and

Southwest Regions, with ATC facilities in Southern and Western Pacific Regions also participating. The field test is being conducted in collaboration with the FAA AT Office of Investigations (AAT-200) and NATCA. (J. Pounds, CAMI)

FAA/NASA Human Factors Weather Research Coordination Effort: On February 21 and 22, over 30 engineers and human factors scientists from the FAA and NASA held the second meeting of a newly established research coordination effort focused on human factors aviation weather research at the NASA Langley Research Center. The first meeting, which was held on August 7 and 8, 2001 also took place at the NASA Langley Research Center, and interest in the effort has since grown because the meetings are considered very beneficial to its participants. It is planned that meetings will take place on a semiannual basis. The goal of the effort is to bring together FAA and NASA engineers and human factors researchers whose work relates to aviation weather information and technologies in an attempt to coordinate efficient and effective methods of attaining common research objectives through a systematic approach to the National Airspace System. Through a coordinated research effort, it is anticipated that research duplication will be avoided and that more focused research objectives can be identified. Future meetings will be held in locations which will give the group the chance to see the broadest scope of human factors weather research. It is tentatively planned that the next meeting will be held at the FAA's William J. Hughes Technical Center this summer. George Greene, the manager of the FAA R&D Field Office, AAR-210, at the NASA Langley Research Center, has agreed to host the research coordination effort's Web site, currently under construction, on the AAR-210 server. Once the Web site is on-line, meeting information and presentations may be downloaded and shared by the effort's FAA and NASA participants. (R. McAdaragh, AAR-100; M.McAnulty, WJHTC)

**Aviation Security Human Factors Grants Awarded:** AAR-510 awarded five 1-year research grants to academic researchers in January 2002. These grants were designed to foster long-term theoretical research in the areas of visual attention, target detection, and object recognition where they relate to the x-ray screener threat detection task. The research institutions receiving these grants were University of California at Davis, Brigham and Women's Hospital, Boston, Massachusetts, University of Central Florida, University of Southampton, United Kingdom, and the State University of New York at Buffalo. The total amount awarded was \$529,200. (C. George, AAR-1)

More information on human factors research can be found at the FAA Human Factors (AAR-100) web site: <a href="http://www.hf.faa.gov">http://www.hf.faa.gov</a>

Mark D. Rodgers FAA (AAR-100)



**February 26-March 3, 2002** – Air Freight Expo 2002, Shangri-La Hotel, Singapore <a href="http://www.eyefortransport.com/asia2001">http://www.eyefortransport.com/asia2001</a>

**February 26-March 3, 2002** – Asian Aerospace 2002, Singapore <a href="http://www.asianaerospace.com/">http://www.asianaerospace.com/</a>

**March 2002** – European Transportation Leaders Conference, Landmark Hotel, London http://www.aviationnow.com/conferences

March 7-8, 2002 – Potomac Chapter Human Factors and Ergonomics Society Mid-Year Symposium, Ft. Belvoir Officer's Club, Virginia <a href="mailto:jerrykrueg@aol.com">mailto:jerrykrueg@aol.com</a>

**March 10-12, 2002** – 2002 Air Freight Management Conference & Exposition, The Westin Diplomat Resort Country Club and Spa, Hollywood, FL <a href="http://www.aemca.org/">http://www.aemca.org/</a>

March 11-15, 2002 – Global Cargo Week & Dangerous Goods by Air Conference & Exhibition, Sofitel Forum Rive Gauche, Paris, France <a href="http://www.iataonline.com/">http://www.iataonline.com/</a>

March 12-13, 2002 – FAA Aviation Forecast Conference, Wash, DC <a href="http://api.hq.faa.gov/Conference/welcome.htm">http://api.hq.faa.gov/Conference/welcome.htm</a>

**March 13-15, 2**002 – 13<sup>th</sup> Annual International Women in Aviation Conference, Nashville, TN <a href="http://www.wiai.org/">http://www.wiai.org/</a>

March 26-28, 2002 – Aviation Suppliers & Services Super Show, Indianapolis, IN <a href="http://www.as3.com/">http://www.as3.com/</a>

**April 2-4, 2002** – 16<sup>th</sup> Symposium on Human Factors in Aviation Maintenance, San Francisco, CA <a href="http://www.galaxyscientific.com/2002hfams/index.html">http://www.galaxyscientific.com/2002hfams/index.html</a>

**April 8-11, 2002** – Aircraft Interiors Expo 2002, Hamburg, Germany <a href="http://www.ukintpress.com/airexpo">http://www.ukintpress.com/airexpo</a>

**April 9-11, 2002** – Maintenance, Repair and Overhaul Conference & Exhibition, Phoenix Convention Center, Phoenix, AZ <a href="http://www.aviationnow.com/conferences">http://www.aviationnow.com/conferences</a>

**April 14-15, 2002** – FAA General Aviation Forecast Conference, Wichita, KS <a href="http://api.hq.faa.gov/Conference/welcome.htm">http://api.hq.faa.gov/Conference/welcome.htm</a>

**April 14-15, 2002** – FREE Flight Safety Boeing Maintenance Human Factors Awareness Training for Managers, Seattle, WA <a href="http://www.fsbti.com">http://www.fsbti.com</a>

April 23-25, 2002 – NBAA Leadership Conference, Nashville, TN <a href="http://www.nbaa.org/">http://www.nbaa.org/</a>

**April 29-May 2, 2002** – DoD HFE TAG, Clarion Hotel Bayview, San Diego, CA <a href="http://dtica.dtic.mil/hftag">http://dtica.dtic.mil/hftag</a>

**April 30-May 1, 2002** – First Threat and Error Management (TREM) Training Workshop, San Salvador, El Salvador <a href="mailto:dmaurino@icao.int">mailto:dmaurino@icao.int</a>

**May 5-9, 2002** – 73<sup>rd</sup> Annual Scientific Meeting of the Aerospace Medical Association, Queen Elizabeth's Hotel, Montreal, Canada <a href="http://www.asma.org/">http://www.asma.org/</a>

May 6-12, 2002 – International Aerospace Exhibition and Conference, Berlin Brandenburg International Airport, Berlin, Germany <a href="http://www.ila-berlin.com/">http://www.ila-berlin.com/</a>

**May 20-22, 2002** – 11<sup>th</sup> Annual Phoenix International Aviation Symposium, The Phoenician Resort, Phoenix, AZ <a href="http://www.phxskyharbor.com/">http://www.phxskyharbor.com/</a>

May 28-30, 2002 - EBACE2002, Geneva, Switzerland <a href="http://www.ebace.com/">http://www.ebace.com/</a>

**June 13-14, 2002** – Aviation Conference and Exposition, Oklahoma City, OK mailto:skymarket@aol.com

**August 27-30, 2002** – Measuring Behavior 2002, 4<sup>th</sup> International Conference on Methods and Techniques in Behavioral Research, University of Amsterdam, Amsterdam, The Netherlands <a href="http://www.noldus.com/events/mb2002/index.html">http://www.noldus.com/events/mb2002/index.html</a>

**September 16-18, 2002** – Conference on Aerospace Materials, Processes and Environmental Technology, Huntsville, AL <a href="http://ampet.msfc.nasa.gov/">http://ampet.msfc.nasa.gov/</a>

September 17-20, 2002 – International Air Cargo Forum, Hong Kong http://tiaca.org/

September 30- October 4, 2002 – Human Factors and Ergonomics Society 46<sup>th</sup> Annual Meeting, Baltimore Waterfront Marriott Hotel, Baltimore, MD <a href="http://www.hfes.org/">http://www.hfes.org/</a>

October 14-16, 2002 – Third LOSA Week, Dubai, United Arab Emirates mailto:dmaurino@icao.int

October 23-25, 2002 – International Conference on Human-Computer Interaction in Aeronautics, Massachusetts Institute of Technology, Cambridge, MA <a href="http://www-eurisco.onecert.fr/eyents/hci-aero2002.html/">http://www-eurisco.onecert.fr/eyents/hci-aero2002.html/</a>

October 27-31, 2002 – 21<sup>st</sup> Digital Avionics Systems Conference, Hyatt Regency Hotel, Irvine, CA <a href="http://www.dasconline.org/">http://www.dasconline.org/</a>

**April 7-27, 2003** – Aviation World's Fair, Newport News/Williamsburg, VA <a href="http://www.worlds-fair.com/">http://www.worlds-fair.com/</a> or <a href="http://aviation-worlds-fair.com/">http://aviation-worlds-fair.com/</a>

**May 4-9, 2003** – 74<sup>th</sup> Annual Scientific Meeting of the Aerospace Medical Association, Convention Center, San Antonio, TX <a href="http://www.asma.org/">http://www.asma.org/</a>

October 13-17, 2003 – Human Factors and Ergonomics Society 47<sup>th</sup> Annual Meeting, Adams Mark Denver Hotel, Denver, CO <a href="http://www.hfes.org/">http://www.hfes.org/</a>

**May 2-7, 2004** – 75<sup>th</sup> Annual Scientific Meeting of the Aerospace Medical Association, Egan Convention Center, Anchorage, AK <a href="http://www.asma.org/">http://www.asma.org/</a>

**September 20-24, 2004** – Human Factors and Ergonomics Society 48<sup>th</sup> Annual Meeting, Sheraton New Orleans Hotel, New Orleans, LA <a href="http://www.hfes.org/">http://www.hfes.org/</a>

Note: Calendar events in Italics are new since the last Newsletter



Comments or questions regarding this newsletter? Please contact Bill Berger at (334) 271-2928 or via e-mail at bill.ctr.berger @faa.gov